

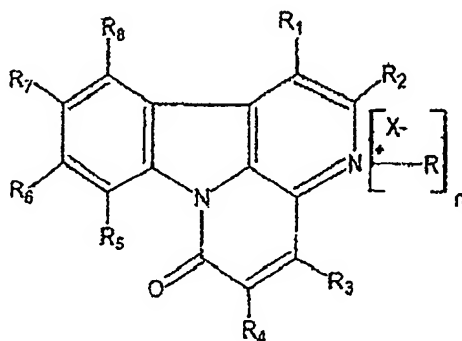
**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-21 (Cancelled).

22. (Previously presented) A method of treating trypanosomiasis in a mammal, which comprises administering to a mammal in need thereof an effective amount of a medicinal product comprising a plant extract comprising one or more compounds of the formula (I):



(I)

wherein R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> represent, independently of one another:

- a hydrogen atom;
- a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;
- a halogen atom;
- halo(C<sub>1</sub>-C<sub>12</sub>)alkyl, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated;
- hydroxyl;
- nitro;
- cyano;
- mercapto;
- carboxylic acid;
- amide;
- amine;
- C<sub>1</sub>-C<sub>12</sub> alkoxy, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated;
- C<sub>1</sub>-C<sub>12</sub> alkyl ester, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated,
- secondary or tertiary alkylamide, wherein an C<sub>1</sub>-C<sub>12</sub> alkyl group(s) thereof is linear, branched or cyclic, and saturated or unsaturated;
- secondary or tertiary alkylamide, wherein an C<sub>1</sub>-C<sub>12</sub> alkyl group(s) thereof is

- linear, branched or cyclic, and saturated or unsaturated,  
C<sub>1</sub>-C<sub>12</sub> alkylthio, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated;  
C<sub>2</sub>-C<sub>6</sub> heterocyclic group containing 1 to 4 hetero atoms selected from the group consisting of sulfur, nitrogen and oxygen;  
a group -SO<sub>2</sub>-NR'R'' or a group -NR'-SO<sub>2</sub>-R'', in which R' and R'' represent, independently of one another, a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;  
n represents 0 or 1;  
R represents a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group; and  
X represents an anion, which is either an inorganic or organic anion.

23. (Currently amended) The method of ~~Claim~~ claim 22, wherein the compound of formula (I) is canthin-6-one.

24. (Currently amended) The method of ~~Claim~~ claim 23, wherein the canthin-6-one is present in the form of an extract of a plant selected from the group consisting of *Ailanthus altissima*, *Brucea antidysenterica*, *Eurycoma harmandiana*, *Peganum nigellastrum*, *Zanthoxylum elephantiasis* and *Zanthoxylum chiloperone*.

25. (Currently amended) The method of ~~Claim~~ claim 24, wherein the canthin-6-one is present in the form of an extract of *Zanthoxylum chiloperone* var. *angustifolium*.

26. (Currently amended) The method of ~~Claim~~ claim 22, for treating trypanosomiasis in a chronic phase or an acute phase.

27. (Currently amended) The method of ~~Claim~~ claim 22, for treating Chagas' disease.

28. (Currently amended) The method of ~~Claim~~ claim 22, for treating trypanosomiasis caused by *Trypanosoma brucei*.

29. (Currently amended) The method of ~~Claim~~ claim 22, for treating trypanosomiasis caused by *Trypanosoma cruzi*.

30. (Currently amended) The method of ~~Claim~~ claim 23, wherein the plant extract comprising canthin-6-one is obtained by a method comprising the first steps of grinding the dried bark of a trunk of *Zanthoxylum chiloperone* var. *angustifolium*, and then treating the ground dried bark with an aqueous alkaline solution.

31. (Currently amended) The method of ~~Claim~~ claim 30, wherein the plant extract comprising canthin-6-one is obtained by a method further comprising a second step comprising extracting the ground bark and aqueous alkaline solution with a chlorinated organic solvent.

32. (Currently amended) The method of ~~Claim~~ claim 22, wherein the medicinal product is administered at a dose of between about 0.01 and 100 mg/kg/d of compound of formula (I).

33. (Currently amended) The method of ~~Claim~~ claim 32, wherein the administered dose is between about 0.1 and 50 mg/kg/d.

34. (Currently amended) The method of ~~Claim~~ claim 33, wherein the administered dose is between about 1 and 20 mg/kg/d.

36. (Currently amended) The method of ~~Claim~~ claim 22, wherein the mammal is a human.

(I)

a hydrogen atom;  
a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;  
a halogen atom;  
halo(C<sub>1</sub>-C<sub>12</sub>)alkyl, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated;  
hydroxyl;  
nitro;  
cyano;  
mercapto;  
carboxylic acid;  
amide;  
amine;  
C<sub>1</sub>-C<sub>12</sub> alkoxy, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated;  
C<sub>1</sub>-C<sub>12</sub> alkyl ester, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated;  
secondary or tertiary alkylamide, wherein an C<sub>1</sub>-C<sub>12</sub> alkyl group(s) thereof is linear, branched or cyclic, and saturated or unsaturated;

secondary or tertiary alkylamide, wherein an C<sub>1</sub>-C<sub>12</sub> alkyl group(s) thereof is linear, branched or cyclic, and saturated or unsaturated;

C<sub>1</sub>-C<sub>12</sub> alkylthio, wherein an alkyl group thereof is linear, branched or cyclic, and saturated or unsaturated;

C<sub>2</sub>-C<sub>6</sub> heterocyclic group containing 1 to 4 hetero atoms selected from the group consisting of sulfur, nitrogen and oxygen;

a group -SO<sub>2</sub>-NR'R'' or a group -NR'-SO<sub>2</sub>-R'', in which R' and R'' represent, independently of one another, a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;

n represents 0 or 1;

R represents a saturated or unsaturated, linear, branched or cyclic C<sub>1</sub>-C<sub>12</sub> alkyl group;

X represents an anion which is inorganic or organic anion, at least one of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub> and R<sub>8</sub> being different from H, or else n=1; and wherein;

when n=0, R<sub>2</sub>=R<sub>3</sub>=R<sub>4</sub>=R<sub>5</sub>=R<sub>6</sub>=H and R<sub>8</sub>=OCH<sub>3</sub>, then R<sub>1</sub> is different from -OH and -OCH<sub>3</sub>;

when n=0, R<sub>1</sub>=R<sub>2</sub>=R<sub>3</sub>=R<sub>5</sub>=R<sub>6</sub>=R<sub>7</sub>=R<sub>8</sub>=H, then R<sub>4</sub> is different from -OCH<sub>3</sub>;

when n=0, R<sub>1</sub>=R<sub>2</sub>=R<sub>3</sub>=R<sub>4</sub>=R<sub>5</sub>=R<sub>7</sub>=R<sub>8</sub>=H, then R<sub>6</sub> is different from -OH and -OCH<sub>3</sub>;

when n=0, R<sub>1</sub>=R<sub>2</sub>=R<sub>3</sub>=R<sub>4</sub>=R<sub>5</sub>=R<sub>8</sub>=H, then (R<sub>6</sub>, R<sub>7</sub>) is different from (-OCH<sub>3</sub>, -OCH<sub>3</sub>);

when n=0, R<sub>2</sub>=R<sub>3</sub>=R<sub>4</sub>=R<sub>5</sub>=R<sub>6</sub>=R<sub>7</sub>=R<sub>8</sub>=H, then R<sub>1</sub> is different from -OCH<sub>3</sub>;

when n=0, R<sub>1</sub>=R<sub>2</sub>=R<sub>3</sub>=R<sub>4</sub>=R<sub>5</sub>=R<sub>6</sub>=R<sub>8</sub>, then R<sub>7</sub> is different from -OH;

and

R<sub>7</sub> is different from -OCH<sub>3</sub>;

when n=0, R<sub>2</sub>=R<sub>3</sub>=R<sub>4</sub>=R<sub>5</sub>=R<sub>6</sub>=R<sub>7</sub>=H and R<sub>8</sub>=-OCH<sub>3</sub>, then R<sub>1</sub> is different from -OH; and

when n=1, X=Cl, R=CH<sub>3</sub>, R<sub>1</sub>=R<sub>2</sub>=R<sub>5</sub>=R<sub>6</sub>=R<sub>7</sub>=R<sub>8</sub>=H and R<sub>3</sub>=-OCH<sub>3</sub> then R<sub>4</sub> is different from -OH.

38. (Currently amended) The compound of ~~Claim~~ claim 36, wherein X<sup>-</sup> is selected from the group consisting of Cl<sup>-</sup>, Br<sup>-</sup>, I<sup>-</sup>, S<sup>-</sup>, PO<sub>3</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, acetate, oxalate, tartrate, succinate, maleate, fumarate, gluconate, citrate, malate, ascorbate and benzoate.

39. (Currently amended) The compound of ~~Claim~~ claim 34, wherein one or more of the conditions below are satisfied;

- a) R<sub>3</sub> represents an NH<sub>2</sub> group or a C<sub>1</sub>-C<sub>12</sub> alkylamine group or a C<sub>3</sub>-C<sub>12</sub> alkylamide group or a C<sub>2</sub>-C<sub>6</sub> heterocycle comprising at least one amine group;

- b)  $R_4$  represents a hydroxyl group or a  $C_1$ - $C_{12}$  alkoxy group; or
- c)  $R_1 = R_2 = R_5 = R_7 = R_8 = H$ .

40. (Currently amended) The compound of ~~Claim~~ claim 36, wherein one or more of the conditions below are satisfied:

- a)  $R_3$  represents an  $NH_2$  group or a  $C_1$ - $C_6$  alkylamine group or a  $C_1$ - $C_6$  alkylamide group or a  $C_2$ - $C_6$  heterocycle comprising at least one amine function;
- b)  $R_4$  represents a hydroxyl group or a  $C_1$ - $C_6$  alkoxy group; or
- c)  $R_1 = R_2 = R_5 = R_6 = R_7 = R_8 = H$ .

41. (Currently amended) The compound of ~~Claim~~ claim 36, wherein one or more of the conditions below are satisfied:

- a)  $R_3$  represents an  $NH_2$  group;
- b)  $R_4$  represents an  $OCH_3$  group; or
- c)  $R_1 = R_2 = R_5 = R_6 = R_7 = R_8 = H$ .

42. (Currently amended) The compound of ~~Claim~~ claim 36, wherein  $R_1 = R_2 = R_3 = R_4 = R_5 = R_6 = R_7 = R_8 = H$  and  $n = 1$ , and  $R$  is a  $C_1$ - $C_6$  alkyl group.

43. (Currently amended) The compound of ~~Claim~~ claim 36, which is:  
4-aminocanthin-6-one.

44. (Currently amended) The compound of ~~Claim~~ claim 36, which is N-methylcanthin-6-one iodide.

45. (Currently amended) A pharmaceutical composition, which comprises one or more compounds of ~~Claim~~ claim 37, and a carrier.

46. (Previously presented) A pharmaceutical composition, which comprises a plant extract obtained from *Ailanthus altissima*, *Brucea antidysenteria*, *Eurycoma harmandiana*, *Peganum nigellastrum*, *Zanthoxylum elephantiasis* and *Zanthoxylan chiloperone*; and a carrier.

47. (Currently amended) The pharmaceutical composition of ~~Claim~~ claim 46, wherein said plant extract comprises canthin-6-one, 4-aminocanthin-6-one or N-methylcanthin-6-one iodide or a mixture thereof.

48. (Previously presented) A method of treating trypanosomiasis in a mammal, which comprises administering to a mammal in need thereof an effective amount of a plant or an extract thereof selected from the group of *Ailanthus altissima*, *Brucea antidysenteria*, *Eurycoma harmandiana*, *Peganum nigellastrum*, *Zanthoxylum elephantiasis* and *Zanthoxylan chiloperone*; and a carrier.

49. (New) The method of claim 22, wherein for said one or more compounds of the formula (I), n is 0, and one of R<sub>3</sub> or R<sub>4</sub> is other than -H.

50. (New) The compound of claim 37, wherein for said one or more compounds of the formula (I), n is 0, and one of R<sub>3</sub> and R<sub>4</sub> is other than -H.

51. (New) The composition of claim 45, wherein for said one or more compounds of the formula (I),  $n$  is 0, and one of  $R_3$  and  $R_4$  is other than  $-H$ .